Division 1:
Prehospital
Environment

Section 2. EMS Systems

TOPIC	CONTENT OUTLINE
Introduction	The student must have successfully completed the following section prior to participating in this section. Section I. Roles and Responsibilities
Overview	I. Introduction II. Prospective III. Immediate IV. Retrospective
Objectives	At the completion of this section, the student will be able to: 1.2.1 Discuss citizen access and the various mechanisms of obtaining it. 1.2.2 Discuss prehospital care as an extension of hospital care. 1.2.3 Define stabilization of patients. 1.2.4 Define and describe medical control. 1.2.5 Describe physician responsibility for Medical Control. 1.2.6 Describe the relationship between the physician on the scene, the EMT-I, and the physician on the radio. a. Physician who is with the patient when the EMT-I arrives, b. The physician who arrives on the scene after the EMT-I's have started evaluating and treating the patient. 1.2.7 Describe the benefits of EMT-I follow-up on patient condition, diagnosis, and retrospective review of prehospital care. 1.2.8 Describe GSA/KKK Ambulance standards. 1.2.9 Define the American College of Surgeons Essential Equipment List and how it relates to local State laws. 1.2.10 Define the national standard levels of prehospital provider as defined by curriculum, respectively a. Discuss ambulance placement and the parameters that should be utilized in its development, including the differences in urban, suburban and rural settings. 1.2.11 Discuss the medical community role in overseeing prehospital care. 1.2.12 Define protocols and standing orders. 1.2.13 Describe the development of protocols. 1.2.14 Define local training standards. 1.2.15 Describe the legislation in the EMT-I's State as regards prehospital care. 1.2.16 Describe integration of prehospital care into the continuum of total patient care with the emergency department phase of hospital care. 1.2.17 Discuss replacement of equipment and supplies. 1.2.18 Discuss the EMT-I's initial responsibilities when arriving on the scene. 1.2.19 Describe the relationship between the physician on the radio and the EMT-I at the scene. 1.2.20 Discuss the varying philosophies between the management of medical patients and trauma patients, prehospital. 1.2.21 Describe the transition of patient care from the EMT-I, including: a. Transfer of responsibility (legal and medical),

b. Reporting of patient status to physician or nurse.

.2.22 Describe the ability of physician run critique based on documentation

.2.23 Describe retrospective evaluation of patient care, including run report review, continuing education, skill practice, and skill deterioration.

TOPIC	CONTENT OUTLINE
Introduction	A. Citizen system overview 1. Care available from EMS 2. What EMS is 3. Cost of service 4. Access 5. First aid a. CPR b. Hemorrhage control c. Do Not Move Patient d. Other B. Prehospital care 1. Extension of hospital care 2. Initiation of patient stabilization a. Definitive patient care must be provided as soon as possible. For many patients, this can be started and to a great measure completed in the field. b. Blood replacement and definitive hemorrhage control—for the trauma patient, for example—must be provided in the operating room. For these patients, the resuscitation measures must be initiated in the field or during transport with rapid movement to the appropriate hospital. c. Recognition of the difference between a and b above, and correct action by the EMT-I, is critical to increasing long-term survival and reducing complications and disability 4. Medical Control a. Physician development of patient care protocols i. Overall patient care ii. Standing orders iii. Relationship between the Medical Command Authority and the on-scene physician: (a) Arrival before EMT-I's (b) Arrival after the EMT-I's b. On-line medical control to direct patient care i. Physician ii. Physician designee c. Physician review of run C. Hospital care 1. Emergency department 2. Admission 3. In-hospital care 4. Discharge follow-up D. Preparation, management, and review 1. Pre-incident planning 2. Immediate field care 3. Incident follow-up

TOPIC	CONTENT OUTLINE

Prospective

A. Vehicles
   1. KKK Standards
   2. Equipment
      a. American College of Surgeons' Committee on Trauma Essential Equipment List
      b. Additional equipment as per service needs
         i. Environment
         ii. Rescue
         iii. Geographic
         iv. Special services
   3. Placement strategy
      a. Associated services which may provide first response
      b. Location of ambulances for primary response

B. Personnel
   1. EMT-Ambulance
      a. National Standard Curriculum
      b. Skills and knowledge
         i. CPR
         ii. Airway and ventilation
         iii. Hemorrhage control
         iv. Fracture stabilization
         v. Emergency childbirth
         vi. Extrication
         vii. Special rescue skills
         viii. Diagnosis and management
         ix. Pneumatic Antishock Garment (PASG)
         x. Communication
   2. EMT-Intermediate
      a. National Standard Curriculum
      b. Skills and knowledge
         i. All of EMT-A curriculum content
         ii. Patient assessment and initial management
         iii. Esophageal intubation device airway (EOA)
         iv. Optional skill
            (a) Endotracheal intubation
            (b) Defibrillation
         v. Recognition and management of shock
         vi. Ventilation management
         vii. Intravenous fluid therapy
   3. EMT-Paramedic
      a. National Standard Curriculum
      b. Skills and knowledge
         i. All of EMT and EMT-I
         ii. Advanced airway management
         iii. Medical

INSTRUCTOR'S NOTES

Response for major cardiac, medical and trauma emergencies should be as short as possible to increase salvage. Urban responses should average 3–5 minutes while rural responses will necessarily be longer due to terrain, obstructions, and density of population.

(a) Cardiac (AHA-ACLS)
(b) Other medical emergencies
iv. Advanced trauma management as identified by the American College of Surgeons and American Academy of Orthopedic Surgeons
v. Optional skill and therapeutics

C. Citizen access
1. Telephone
a. 9-1-1
b. Well-publicized telephone number
2. Citizen education

D. Dispatch
1. Training: Department of Transportation (DOT)
a. Knowledgeable of EMT-skills
b. Telephone first aid until unit arrives
2. Dispatch of appropriate unit
a. Distance
b. Time
c. Appropriate level of care

E. Communication
1. Dispatcher to ambulance
a. Availability at all times
b. Two-way communication
2. Medical
a. Two-way
b. Frequencies
—UHF
—VHF
c. Physician to EMT-I
d. Type
i. Simplex
ii. Duplex
iii. Multiplex
e. Telemetry (local option)
f. Telephone

F. Medical standards
1. Medical Society role
a. EMS committee
b. Medical Director
2. Patient care protocols
a. Patient management guidelines
b. Standing orders
c. Verbal orders
d. Major incident protocols
3. Training standards

INSTRUCTOR'S NOTES

TOPIC	CONTENT OUTLINE
	a. Initial training b. Continuing education 4. Legislation regarding prehospital care 5. Role of EMS system and its interface with hospitals a. Drug and supply exchange b. Housing for unit c. Emergency department (ED) observation d. Education
Immediate	A. EMT arrival on scene 1. Scene assessment 2. Patient(s) evaluation 3. Management if life-threatening conditions B. EMT-I physician contact 1. Description of situation 2. Description of patient 3. Description of care instituted 4. Physician instruction for additional care C. EMT-I management 1. Completion of physician instructions for patient care 2. Preparation for transportation 3. Transportation a. Trauma—as soon as possible b. Medical—usually after initiation stabilization
Retrospective	A. Run critique 1. Adequate a. Assessment b. Care c. Communication d. Documentation B. Continuing education 1. Based on run critiques 2. Review of original training 3. New information a. Skills b. Procedures c. Devices d. Drugs C. Skill review D. Changes in protocols and standing orders

INSTRUCTOR'S NOTES